

Notice of Allowability

Application No.

10/722,531

Examiner

Michael P. Stafira

Applicant(s)

HAMAMATSU ET AL.

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE filed 5/15/2007.
2. ☒ The allowed claim(s) is/are 4-13 and 15-17.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 5/15/2007
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Allowable Subject Matter

2. Claims 4-13, 15-17 are allowed over the cited prior art.
3. The following is an examiner's statement of reasons for allowance:

Regarding claim 4, the prior art fails to disclose or make obvious an inspection apparatus having a cartridge equipped with a plurality of substrates for forming said spatial filter; a cleaner which cleans said substrates of said cartridge; and a printer which prints the Fourier transformed image of the circuit pattern under inspection of the object onto the substrates of said cartridge, and in combination with the other recited limitations of claim 4. Claims 5, 10, 12 are allowed by the virtue of dependency on the allowed claim 4.

Regarding claim 6, the prior art fails to disclose or make obvious an inspection apparatus having wherein said detection optical system comprises a Fourier transform lens which Fourier transforms the diffracted light reflected from the circuit pattern of said object, and an inverse Fourier transform lens which inverse Fourier transforms light obtained through said spatial filter, and in combination with the other recited limitations of claim 6.

Regarding claim 7, the prior art fails to disclose or make obvious an inspection apparatus having an detection optical system comprising a Fourier transform lens which Fourier transforms

Art Unit: 2886

diffracted light coming from said circuit pattern of said object, and an inverse Fourier transform lens which inverse Fourier transforms light coming through said spatial filter, and in combination with the other recited limitations of claim 7. Claims 8-9, 11, 13 are allowed by the virtue of dependency on the allowed claim 7.

Regarding claim 15, the prior art fails to disclose or make obvious an inspection method having the steps of setting a plurality of recipes, which differ in intensity of the light to be illuminated on said object, polarized light of illumination light, illumination angle of illumination light, detection visual field size, or detection polarized light setting; wherein said observing step causes said monitor to display foreign matter and defects on an individual recipe basis, and in combination with the other recited limitations of claim 15. Claim 17 is allowed by the virtue of dependency on the allowed claim 15.

Regarding claim 16, the prior art fails to disclose or make obvious an inspection method having the steps of wherein said observing step includes an assigning step for assigning detection number IDs in accordance with foreign matter/defect position and displaying step for displaying size of the foreign matter/defect assigned said IDs and category indicating a manufacturing process where the foreign matter/defect assigned said IDs is occurred, and in combination with the other recited limitations of claim 16.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 2886

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Stafira whose telephone number is 571-272-2430. The examiner can normally be reached on 4/10 Schedule Mon.-Thurs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tarifur Chowdhury can be reached on 571-272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Michael P. Stafira
Primary Examiner
Art Unit 2886

July 27, 2007